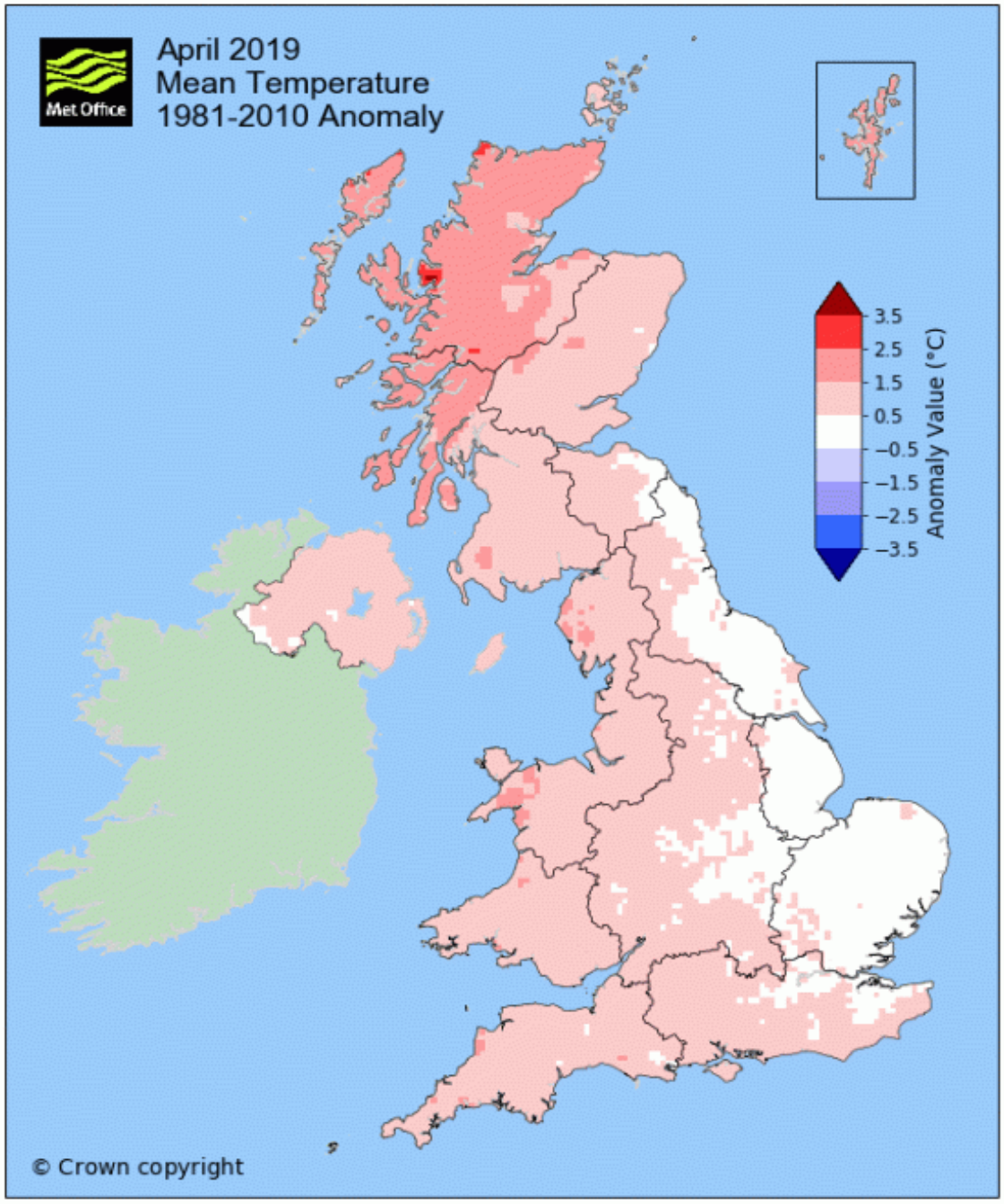
A varied April comes to a warm conclusion

Description

April 2019 will be remembered for a combination of both cold and very warm conditions; the latest statistics show that the warmer spells boosted UK mean temperatures to provisionally 1°C above the long-term average when looking at the month as a whole.

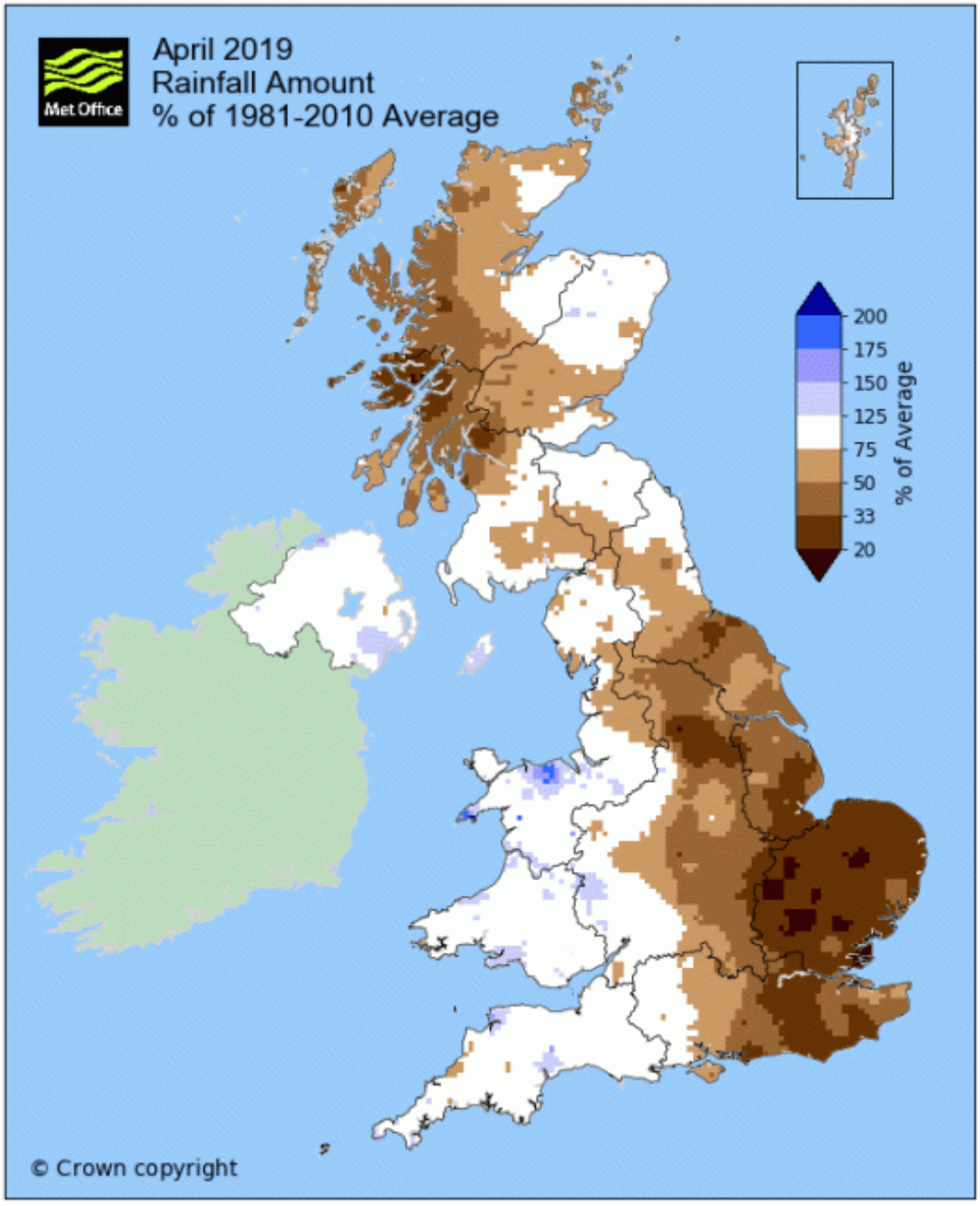
After a cold, and in some places wet, start to the month, many will remember the exceptionally warm and sunny weather across the UK over the Easter weekend. A number of records were broken including it being the hottest Easter Monday on record in England, Northern Ireland, Scotland and Wales. Over the Easter weekend a total of 18 weather stations across the UK broke their April temperature records.

The Isle of Wight was the area with the highest average temperature, 10.2°C, with Middlesex, Cornwall and Anglesey closely following. The highest temperature recorded was 25.8°C at Treknow in Cornwall on 19th April. Scotland was also notably warm when compared to the long-term 1981-2010 average with mean temperatures 1.4°C higher for the month.



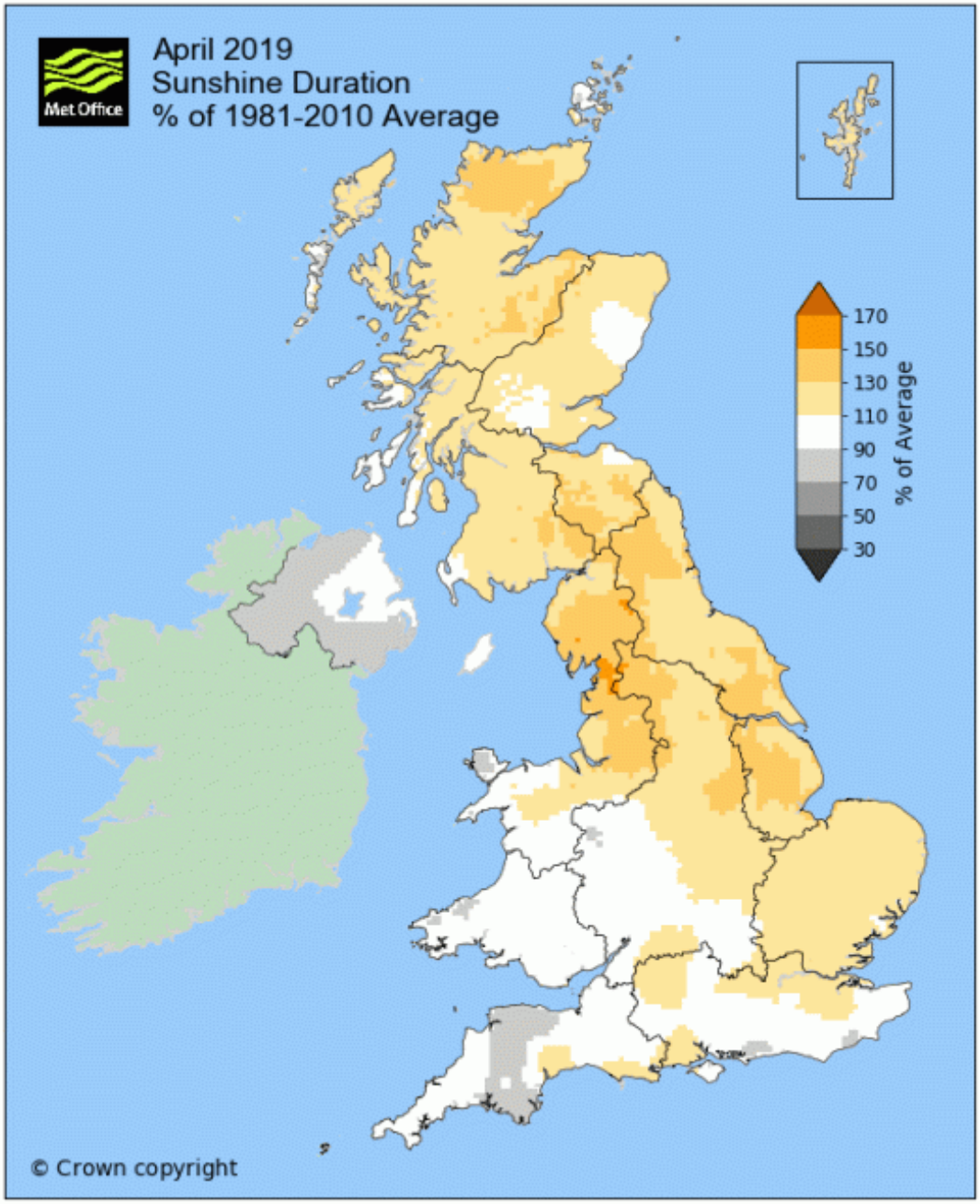
Map shows April 2019 mean temperature as a percentage of the 1981-2010 climatological average

Overall it was a relatively dry month with only Wales and Northern Ireland reaching average rainfall totals. England has seen particularly low levels of rainfall, especially in the east. East Anglia has received just 25% of its average monthly rainfall. The former county of Huntingdonshire was the driest county, with just 9.5mm of rain through the whole of April.



Map shows April 2019 rainfall as a percentage of the 1981-2010 climatological average

As well as being a dry month, April was a particularly sunny month too. The UK saw 14% more sunshine hours than average with only Northern Ireland receiving below average sunshine with 87% of the long-term average. East Anglia was also the sunniest region with 191.2 hours of sunshine, 19% more than the long-term average.



Map shows April 2019 sunshine hours as a percentage of the 1981-2010 climatological average

Provisional April 2019	Mean temp (°C)		Sunshine (hours)		Rainfall (mm)	
	Actual	Diff from avg (°C)	Actual	% of avg	Actual	% of avg
UK	8.4	1.0	168.9	114	51.4	71
England	8.8	0.7	179.3	116	37.8	64
Wales	8.8	1.2	154.7	100	101.0	113

Scotland	7.5	1.4	162.9	121	55.6	61
N Ireland	8.5	0.9	127.2	87	78.5	105

Date Created
May 2019

Changing climate = a changing view of the British & Irish garden

Description

In late February 2019, an historic climate event occurred. A flow of very warm southerly air (in conjunction with an area of high pressure) resulted in the first recorded occurrence of temperatures in excess of 20 °C during a UK winter season, reaching 21.2 °C at Kew Gardens.

This week delegates of the PlantNetwork charity's annual conference will be gathering at Abbotsbury Subtropical Gardens to discuss the issues posed by climate change and how these will affect the nation's gardens and designed landscapes.

The February warm spell created several issues for gardeners:

- many garden plants emerged rapidly from their dormancy (only to be damaged by the frosts in April);
- lawns required their first and second cuts much earlier than normal;
- many gardeners needed to water their gardens.

Janet Manning, Water Management Specialist at the Royal Horticultural Society, said: "Twitter was scattered with tweets from gardeners who felt the need to water their gardens for the first time ever in February,"

Taro (Colocasia esculenta) – a tropical root vegetable from southern Asia – might become more widespread across southern Britain in future: it already grows well at Abbotsbury

Subtropical Gardens cared for by curator Stephen Griffith (pictured).

Gardens have to endure drought, heavy rainfall and extremes of temperature. The types of plants grown in gardens and how gardens are designed and managed will need to change to take into account higher temperatures and changing rainfall patterns. Key to all of this is translating the current climate projections to gardens around the country.

John Edmiston, of the nursery Tropical Britain, considers the types of plants we might be growing in a hotter, drier climate. He said: “Climate change will have a massive effect on British horticulture. Gardens will need to be more resilient to drought. The dominant style in British garden design has for many years focused on herbaceous perennials soaking up large quantities of water. As we move into a hotter drier future, many public gardens and garden designers will use more plants adapted to dry conditions, combining hardy desert species with drought-resistant perennials to create a new style. Fifty years from now, British gardens will look quite different.”

Dr Mark McCarthy is the head of the Met Office’s National Climate Information Centre. He said: “The UK climate is warming, increasing the likelihood of events such as those seen in February and last summer’s heatwave. The latest set of UK climate projections (UKCP18) show that extreme hot summers like 2018 or 1976, could be more frequent by the 2050s, and that our winters are very likely to be milder and wetter.”

Invasive potential

Introducing plants into gardens from around the world is not risk free. New pests and diseases have the potential to spread into the UK on a variety of plant material and in soils, particularly as the UK climate becomes more amenable to their survival. Tomos Jones, a PhD student at the University of Reading, has studied the invasive potential of many ornamental plants. Tomos said: “Climate change could allow more ornamentals to become invasive, as conditions become more suitable. Gardeners have an important role to play in preventing plant invasions, in their choice of plants to grow and in disposing of potentially invasive plants responsibly. Gardeners are on the ‘front line’ in identifying plants in their gardens showing ‘invasive characteristics.”

There are design challenges too. Heritage gardens often use a narrower range of plants than we now have available, but a changing climate might mean that these gardens and landscapes will need to find plants better able to survive rather than being true to the period of the garden. Water and soil management are crucial factors in horticulture and are vital in a changing climate.

Everyone can make a difference. But those small changes can really add up to a significant impact. As Janet Manning, added: “If the 27 million gardeners in the UK could save just one watering can full of mains tap water this summer, we would have saved enough water to supply Bristol, Leeds and Sheffield for a whole day, that’s significant and achievable.”

Simon Toomer, PlantNetwork Chair, said: “Now is the time for horticulture – an industry worth £24bn to the UK economy – to step forward and be part of the solution:, planting a tree is still one of the quickest, simplest and cheapest ways to remove carbon from the atmosphere.”

- PlantNetwork is a charity supporting gardens, arboreta and other plant collections through training, networking and information exchange between gardens. This year’s major topic at the annual conference is “Climate Change and Gardens”, professional gardeners from across Britain

and Ireland will discuss how the sector can be better prepared for a changing climate.

Date Created
May 2019

A day in the sun for Met Office Scientists at Royal Meteorological Society Awards

Description

Scientists from across the Met Office have been recognised for their work at the Royal Meteorological Society Awards. In total 11 Met Office employees received awards at the ceremony held in London.

The award recipients were:

The L F Richardson Prize: Dr Kirsty Hanley, Met Office

The Adrian Gill Prize: Dr Michael J Bell, Met Office

The Innovation Award:

Awarded to The Scottish Flood Forecasting Service, the team from the Met Office included:

Brian Golding, Clive Pierce, Nigel Roberts and Bruce Wright.

The Climate Science Communications Award: Professor Peter Stott, Met Office Hadley Centre

The Gordon Manley Weather Prize

Awarded to the ‘Global and regional climate series’ team, which included the following Met Office employees:

David Parker, John Kennedy, Colin Morice and Holly Titchner.

Dr Kirsty Hanley received the L F Richardson prize for a paper that she lead authored which compared observed statistics of convective clouds with models at km scales and higher resolution models down to a grid length of just 100m. This award recognises a meritorious paper which was published in a Society journal during the preceding four years and was contributed by a member of the Society who was in their early career in meteorology.

The Adrian Gill prize was awarded to Dr Michael Bell for playing a leading national and international role in the development of the new discipline of operational oceanography. Amongst other streams of work, Mike was the lead scientist in the development of the Met Office’s FOAM ocean forecasting system, one of the first systems of its kind. The prize is awarded annually to a member of the Society who has made a significant contribution in the preceding five years and who has also been an author of a paper in the Society’s journals.

Dr Michael Bell receiving the Adrian Gill Prize. Photo: @RMetS

Four Met Office personnel that are part of the Scottish Flood Forecasting Service were recognised for their work on the ‘Surface Water Flood forecasting in Urban Communities’ project. They, along with their colleagues from SEPA, The James Hutton Institute, CEH Wallingford and CPAESS – UCAR, USA, received the Innovation Award which is based around innovation in meteorology, with a particular focus on business and/or public impact. It recognises people, projects or programmes within the academic, scientific or business communities who have made significant contributions to educating, informing or motivating organisations in their response to meteorological challenges.

Professor Peter Stott was awarded the Climate Science Communications Award for his work on the

BBC programme ‘Climate Change: The Facts’. The programme featured Sir David Attenborough and as well as being interviewed for the programme Professor Stott assisted the BBC in their research. The Climate Science Communications Award is awarded annually in recognition of outstanding scientific contributions in the field of climate science and proactive outreach activities to communicate climate science. You can read more about Professor Stott’s career in his own words here.

Professor Peter Stott receiving the Climate Science Communications award. Photo: @RMetS

The Society’s journal ‘Weather’ was first published in 1946 when Gordon Manley was President of the Society and the journal benefited from his encouragement. The Gordon Manley Prize is awarded

annually for any outstanding contribution to Weather through furthering the public understanding of meteorology and oceanography. The Met Office Global and Regional Climate Series team received the prize and is made up of David Parker, John Kennedy, Colin Morice and Holly Titchner.

The full list of award recipients can be seen here: https://www.rmets.org/news/2018-society-awards-and-prize-winners-announced

More information on the background behind each award can be seen here: https://www.rmets.org/awards-and-prizes

Date Created
May 2019